

REMARKS

Status of Office Action

On or about March 18, 2008, Applicant's undersigned representative had a telephone interview with Examiner Zele regarding this matter. In this telephone interview, Examiner Zele stated that there were outstanding issues that prevented the previously indicated allowable subject matter from proceeding to allowance. In this interview, Examiner Zele stated "[i]nasmuch as the previous Office Action failed to raise all insufficiencies discussed, it was discussed that the examiner has agreed to the reopening of prosecution in order for applicant to have a fair opportunity to respond to these deficiencies." On June 16, 2008, the present Office Action was mailed. The Office Action Summary of the present Office Action indicates the action is a non-final; however, the text of the Office Action and PAIR state the action is final. On or about August 22, 2008 and September 3, 2008 the Applicant's undersigned representative discussed the status of this Office Action with Examiner and, to the representative's understanding, an agreement was reached that, given the facts as presented above, the Office Action should properly be a non-final action. While it was understood at the time that the Examiner would issue an interview summary to this effect, no such summary has been issued to date. Accordingly, the Applicant's now proceed with the good faith belief and understanding that the present office action is a non-final Office Action and hereby address the issues discussed originally with Examiner Zele.

Amendment Summary

Claim 1 has been amended to recite that the first and second sets of sub-panels comprise an identical vertical resolution.

Claim 5 has been amended to recite that the first and second display panels comprise an identical vertical resolution.

Claims 19-23 have been cancelled without prejudice.

Claim 24 has been amended recite that the first and second portions of the display comprise an identical vertical resolution.

Claim 28 has been amended to recite that the first and second portions of the display comprise an identical vertical resolution.

Claim 33 has been cancelled without prejudice.

Claims 34-36 have been added.

Support for these amendments is found throughout the original specification. No new matter has been added.

Claim Status

Claims 1 – 6, 24 – 32, and 34-36 are presently pending.

Claim Rejections

In the Office Action, claims 1, 4, 5, and 19-33 were rejected under 35 USC 102(e) over Nomura et al. (5,881,299), and claims 2, 3, and 6 were rejected under 35 USC 103(a) over Nomura in view of Uchida et al. (5,877,733).

While the Applicant disagrees with the rejections, they have cancelled claims 19-23 and 33, rendering their rejections moot, and amended the remaining claims in order to advance the remaining claims to allowance.

Claim 1 includes a recitation wherein “the first and second sub-panels comprise an identical vertical resolution.” As explained in the specification, having identical vertical resolutions allows for the use of the same controller signals for both sub-panels as both sub-panels will have the same duty cycle. Were different vertical resolutions to be used, the “controller would need to refresh to the larger of the two resolutions thereby undermining bus bandwidth, memory resources and frame rates.” Column 6, lines 45-51. Furthermore, having identical vertical resolutions allows for the use of the same common drivers for the different sub-panels.

Nomura and Uchida, on the other hand, clearly teach that the first and second displays have different vertical resolutions. For example, the Office Action references AREA 1 and AREA 2 of Figure 8 of Nomura to provide this element, which was previously presented in claim 33. However, examining AREA 1 and AREA 2 of Figure 8, it is clear that they have identical horizontal resolutions (provided by the segment

drivers 105b) and different vertical resolutions (provided by common drivers 105c and 105d).

It may be noted that the nature of the control provided by the different drivers, e.g., common drivers versus segment drivers, are different and provide different contributions to the power saving benefits describe in the present application. For example, a common driver simply activates an entire line. However, the segment drivers have to load each line with data, by latching the data from a serial to a parallel manner in order to selectively drive each of the pixels. Therefore, providing the opportunity to shut down a segment driver, as discussed in the present application, to power down a portion of the display, provides a disproportionately high power savings with respect to powering down a common driver as taught by Nomura.

For at least these reasons, claim 1 is patentable over these references. Claims 2-6 and 24-32 include elements similar to those discussed above. Accordingly, these claims are also patentable over these references.

New Claims

In the Office Action, claims 34-36 have been added. These claims include recitations that each segment driver has one or more logic pins (see, e.g., SHL pin and EIO2 pins of Figure 2) to receive voltages (see, e.g., VL and VSS of Figure 2) to provide logic levels (see, e.g., page 5, lines 1-2), and a positive power rail pin (see, e.g., VCC pin of Figure 2). Having the separate logic and power pins, as opposed to having one pin for both as is the case with prior art segment drivers (see, e.g., Figure 1), allows the display driver and power control block to individually control the various sub-panels. Accordingly, these claims are patentable over the cited references for at least these reasons.

Reissue Oath/Declaration

In the Office Action, the reissue oath/declaration filed on 3/19/01 was said to be defective. The Applicants will wait until the case is in condition for allowance, and then

submit a cumulative supplemental reissue oath/declaration pursuant to 37 CFR 1.175(b)(1) as is suggested by MPEP 1444.

Written Consent

In the Office Action, it is stated that the application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent.

An assent of the assignee was filed on November 22, 2002. Subsequently, Applicants provided the statement specifying where documentary evidence of a complete chain of title could be found in Applicant's filing of May 9, 2007. Accordingly, the Applicant believes that proper consent has been established. If it is the Examiner's position that the consent is insufficient or otherwise ineffective for any reason, he is requested to clarify by providing an explanation of such.

Formatting of Specification

In the Office Action, the specification was objected to for failing to provide the specification and claims in the required two column format per MPEP 1411. The Applicants hereby provide the specification in the required two column format.

Conclusion

In light of the above remarks, Applicants respectfully submit that this application is now in condition for allowance. Early issuance of Notice of Allowance is respectfully requested.

The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 500393.

Respectfully submitted,
Schwabe, Williamson & Wyatt, P.C.

Dated: 9/16/2008
Pacwest Center, Suite 1900
1211 SW Fifth Avenue
Portland, Oregon 97204
Telephone: 503-222-9981

/Nathan R. Maki/
Reg No. 51110